

ALGORITHM TO INCREASE LOGIC INPUT WIDTH BY CASCADING

PRODUCT TERMS

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ABSTRACT

An algorithm is disclosed to partition input variables between a feeder logic block and a receiver logic block. For a given input variable partition, the algorithm assigns both a cost to the number of product terms cascaded from the feeder logic block to the receiver logic block as well as a cost that increases as the number of input variables assigned to the receiver logic block approaches its maximum input width. The costs for a variety of input variable partitions are tested to determine an optimal input variable partition.

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